REMARKS

Claims 1, 7-12, 19-28 and 30-37 are currently pending. Claims 24, 25 and 30-35 have been withdrawn by the Examiner as relating to a non-elected invention. Applicant respectfully requests rejoinder of these claims upon allowance of claim 1.

Claim 1 has been amended, without prejudice, to clarify that, in some embodiments, the present invention is directed to a battery for use in combination with a microchip, the battery comprising: an anode compartment including an anode; a cathode compartment including a cathode; and disposed within said anode compartment, within said cathode compartment, or between said anode compartment and said cathode compartment, an electrolyte suspension that can be used to generate a current of electrons, which suspension comprises a plurality of hollow particles in electrically conductive contact, said hollow particles comprise a substrate permeable and electrically conductive outer shell and entrapped therein a redox-reaction catalyzing enzyme catalyzing an enzymatic conversion of said substrate in said hollow particles thereby liberating electrons, wherein the enzyme is an oxidase. This amendment is supported at least by page 1, lines 9-16 of the specification.

Claim 26 has been amended to clarify that, in some embodiments, the electron carriers are ferrocene derivatives and viologen derivatives.

No new matter has been added to the application by any of the foregoing amendments.

§112 rejection

Claim 26 has been rejected under 35 U.S.C. §112, second paragraph, for indefiniteness because of use of the phrase "such as". Claim 26 has been amended, without prejudice, to clarify that, in some embodiments, the electron carriers are ferrocene derivatives and viologen derivatives. Applicant respectfully requests withdrawal of this rejection.

§102(b) rejection

Claims 1, 7, 19-23 and 36 are rejected under 35 U.S.C. §102(b) as being anticipated by Trau et al. (Biosensors and Bioelectronics, Available online 5/14/03) supported by

definitions from Merriam-Webster.com ("battery" definition #4 and "electrolyte"). The reasons for rejection are set forth in the Office Action at pages 3-4. For brevity, these reasons for rejection are not repeated but are incorporated by reference herein.

Applicant respectfully traverses the §102(b) rejection and request that the rejection be reconsidered and withdrawn.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Trau et al. does not disclose *hollow* particles having an oxidase entrapped therein, such as are set forth in claim 1. Trau et al. describe the immobilization of biomaterials in, for instance, a layer or in a matrix; however the entrapment of oxidase in hollow particles is not disclosed.

The effect of entrapped oxidase is that the shell of the hollow particle could have a variety of properties without hindering the oxidase, such as selective permeability, robustness and conductivity as discussed at paragraph [0003] of the application. Thus, Trau et al. in view of definitions from Merriam-Webster.com is missing an element of claim 1 and does not anticipate claim 1. Claims 7, 19-23 and 36 depend from claim 1, and are novel over the disclosure of Trau et al. in view of definitions from Merriam-Webster.com for at least the same reasons as with respect to claim 1.

For at least the foregoing reasons, claims 1, 7, 19-23 and 36 are novel over the disclosure of Trau et al. in view of definitions from Merriam-Webster.com. Accordingly, Applicants request reconsideration and withdrawal of this rejection.

§103(a) rejection

Claims 1, 7-12, 19-23, 28 and 36 have been rejected under 35 U.S.C. §103(a) as obvious over Trau et al., in view of Zaitsev et al. (Colloids and Surfaces A, available online 5/21/2003), further in view of Vriezema et al., (Angew. Chem. Int. Ed., available online 2003). The reasons for rejection are set forth in the Office Action at pages 5-10. For brevity, these reasons for rejection are not repeated but are incorporated by reference herein.

Applicant respectfully traverses the §103(a) rejection and request that the rejection be reconsidered and withdrawn.

As reiterated by the Supreme Court in *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 82 U.S.P.Q.2d 1385 (2007), the framework for the objective analysis for determining obviousness under 35 U.S.C. §103 is stated in *Graham v. John Deere*. Examination Guidelines for Determining Obviousness Under 35 U.S.C. 103 in View of the Supreme Court Decision in *KSR International Co. v. Teleflex Inc.*, 72 Fed. Reg., No. 195 (October 10, 2007) at page 57527 (hereinafter "Examination Guidelines"). The factual inquiries enunciated by the Court are as follows:

(1) Determining the scope and content of the prior art;

(2) Ascertaining the differences between the claimed invention and the prior art; and

(3) Resolving the level of ordinary skill in the pertinent art.

Examination Guidelines at page 57527.

As discussed above, Trau et al. does not suggest or disclose *hollow* particles having an oxidase entrapped therein, such as are set forth in claim 1. Trau et al. describe the immobilization of biomaterials in, for instance, a layer or in a matrix; however the entrapment of oxidase in hollow particles is not disclosed.

Although Vriezema et al. may teach the principle of hollow particles, Vriezema et al. does not teach how to provide a battery, nor a battery based on an oxidase. Therefore, one of ordinary skill in the art would not be motivated to combine the disclosures of Vriezema et al. and Trau et al.

Zaitsev et al. does not suggest or disclose (glucose) oxidase and does not disclose PS-PIAT. Therefore, the statement of the Office Action that lipase and GOX are successfully encapsulated under the same conditions appears to be unsupported.

Therefore, one of ordinary skill in the art would not be motivated to combine the disclosures of Trau et al., in view of Zaitsev et al., further in view of Vriezema et al. as asserted in the Office Action to arrive at the presently claimed invention.

For at least the foregoing reasons, claims 1, 7-12, 19-23, 28 and 36 are not obvious over the disclosures of Trau et al., in view of Zaitsev et al., further in view of Vriezema

et al. Accordingly, Applicant requests reconsideration and withdrawal of this rejection.

Conclusion

It is believed that any pending objections and rejections have been addressed. However, the absence of a reply to a specific rejection, issue, or comment does not signify agreement with or concession of that rejection, issue, or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Applicant submits that the pending claims are in condition for allowance, which action is requested. The Examiner is invited to contact the undersigned directly at 412-227-3061 with any questions.

Respectfully submitted,
THE WEBB LAW FIRM

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